

**III. REMARKS****Status of the Claims**

Claims 1 and 6 are amended. Claims 1,2,4-7,11,13,14,16-18 are submitted for further consideration.

**Summary of the Office Action**

Claims 6, 7, and 11 stand rejected under 35USC102(e) on the basis of the cited reference Ito, Claims 1, 2, 4, and 5, stand rejected under 35USC103(a) based on the cited reference Ito, et al in view of the reference Hayakawa, U.S. Patent No. 6,738,412. Claims 13, 14, and 16-18 stand rejected under 35USC103(a) based on the cited reference Ito, et al in view of the reference Hayakawa and further in view of the reference Howell, U.S. Patent No. 5,969,894. The Examiner is respectfully requested to reconsider his rejections in view of the following remarks.

Applicant has amended the claims to clarify the novel features of the invention for which protection is sought in this application. These amendments are submitted in response to the Examiner's request to identify the distinguishing features of the claims over the reference Ito. In particular the significance of achieving a timing lock is explained. Applicant submits that the amendments after final rejection place the claims in condition for allowance or in the alternative to place the claims in better condition for appeal. The Examiner is requested to exercise his discretion and enter these amendments.

In rejecting the claims, the examiner has cited, for the first time, the reference Howell as a basis for the obviousness rejections. The citation of this new reference

was not necessitated by Applicant's prior amendments and accordingly the issuing of final rejection is improper under MPEP section 706.07(c) where it is stated:

"While the rules no longer give to an applicant the right to "amend as often as the examiner presents new references or reasons for rejection," present practice does not sanction hasty and ill-considered final rejections. The applicant, who is seeking to define his or her invention in claims that will give him or her the patent protection to which he or she is justly entitled should receive the cooperation of the examiner to that end, and not be prematurely cut off in the prosecution of his or her application."

The Examiner is respectfully requested to reconsider the final nature of the pending office action and his rejection in view of the above amendments and the following arguments. The entering of the above amendments will permit the clarification of the issues for appeal or the allowance of the claims and will assist applicant in obtaining the patent protection to which it is entitled.

#### **Discussion of the Cited References**

The Examiner has cited the reference Ito in support of the rejections on the basis of Anticipation and Obviousness. The reference Ito describes a system for providing communication to mobile equipment loaded in a vehicle. The system is constructed to maintain satisfactory communication through the vehicle's speed range. A speed detector provides a signal indicative of the speed change. A predetermined vehicle speed value is set and compared to a detected vehicle speed to trigger a change in the communication speed when the predetermined speed value is crossed. At low vehicle speed, communication speed is high

and at high vehicle speed, communication speed is low. One method suggested for adjusting communication speed is to vary the chip rate. This is claimed to minimize the effect of Doppler Shift as vehicle speed varies. The control components of the system of Ito are traveling speed determining section 19, data communication speed change request section 21, and Data Communication Speed Change Control Section 27. These components are adapted to change communication speed. This function may indirectly change the PN code produced in Generating Section 5.

Although the system of Ito varies chip rate, it does so in a completely different manner for a completely different purpose relative to the subject system. In the subject system code rate is increased during the process of signal acquisition in response to a correlation step that achieves a timing lock at a first code rate for the purpose of reducing the signal acquisition time. The system of Ito does not increase the code rate in response to correlation, but varies the code rate according to a vehicle's speed. The control elements of Ito likewise are designed to change communication speed according to vehicle speed. In addition there is no mention of any means or desire to maintain the timing lock achieved with the first code rate. The disclosure of Ito therefore, does not support the rejection based on anticipation.

#### **The Issue of Anticipation**

The anticipation analysis requires a positive answer to the question of whether the system of Ito would infringe the claims of this application, if it were later.

Claim 6 of this application is directed to a system capable of performing the following steps:

"control circuits for, as part of the acquisition and correlating of the signal with the first code sequence, achieving a timing lock at said first code rate; and

wherein said control circuits cause said first and second multi-rate code generators, at said first and second transceivers, to shift to a second code sequence having a second code rate that is higher than said first code rate, said control circuits further using a narrow bandwidth timing recovery loop to maintain the timing lock achieved during the acquisition of the first or lower rate PN code.

Since the communication speed control elements of the cited reference Ito does not cause chip rate to shift in response to a correlation step, does not cause a timing lock to be achieved as part of acquisition and correlation, and does not cause the timing lock to be maintained, while the code rate is changed, there is no infringement of the subject claims. Therefore the teaching of Ito does not support the rejection of claims 6,7, and 11 based on anticipation.

#### The Issue of Obviousness

With regard to claims 1,2,4 and 5, the Examiner indicates that the reference Ito fails to teach achieving a timing lock at said first code rate. As indicated above, Ito also fails to teach the changing of code rate as part of acquisition and correlation of a signal. Further, according to amended claim 1, Ito fails to disclose maintaining the timing lock achieved at the first code rate while changing to a second code rate.

The Examiner cites the reference Hayakawa as teaching that

a time lock is achieved during acquisition and correlation of a signal. The system of Hayakawa involves the setting of a code rate between a transmitter and a receiver. There is no reference to a timing lock. In the system of Hayakawa, a code rate is negotiated between transmitter and receiver based on a variety of factors. For example, at column 3, lines..., Hayakawa states:

"Preferably, the control means controls the chip clock signal generation means such that the chip clock signal  $f_c$  is determined on the basis of a signal entered by way of the user interface or such that the chip clock signal  $f_c$  is determined on the basis of the data stored in the storage means. Preferably, the control means controls the chip clock signal generation means such that the chip clock signal  $f_c$  is determined on the basis of a target value  $W$  of the power consumed by the mobile communications device. The target power consumption value  $W$  may be determined on the basis of a signal entered by way of the user interface or the data stored in the storage means."

There is nothing in the cited reference Hayakawa that teaches that a timing lock is achieved at a first code rate and maintained while the transmitter and receiver are shifted to a second code rate. The reference Hayakawa does not teach the changing of a first code rate to second code rate upon correlation. In fact the disclosure of Hayakawa fails to add anything relevant to the subject application. Although it appears to be compatible with the system of Ito, there is nothing in the references that would encourage their combination. Applicant submits that Hayakawa fails to support the rejection of claims 1,2,4 and 5 based on obviousness.

Further with regard to claims 13,14, and 16-18, the

Examiner likens the CRC or parity check of Ito to the calculation of the probability of detection value in the subject system. The error check of Ito is based on an error occurrence rate. An error occurrence reference rate is set and, if the reference rate is exceeded, any requested change in communication speed is cancelled. A person skilled in the art would not be taught to modify the error check of Ito to obtain the probability detection value of the subject invention, nor does Ito teach that code rate may be changed in response to the error check of Ito. Ito blocks any communication speed change when an error occurrence rate is exceeded. It is not understood how Howell's teaching that SNR has an inverted relationship with an error occurrence rate remedies the deficiencies of Ito and Hayakawa.

It is well settled that in order to establish a prima facie case for obviousness, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, without reference to the disclosure of this application.

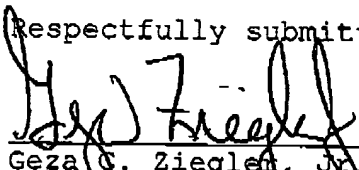
Applicant submits that the above described deficiencies of the reference Ito, are not remedied by combination with the reference Hayakawa and/or Howell. The modification of the teachings of Ito, Hayakawa, and Howell in order to obtain the invention, as described in the claims submitted herein, would not have been obvious to one skilled in the art.

The above arguments apply equally to the rejected dependent claims.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
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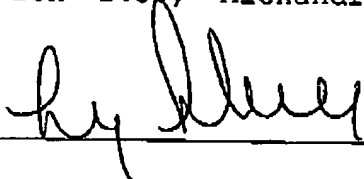
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